

PROJECT TITLE : Unit Operations II
PERIOD COVERED : March 27th - April 30th, 1980
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Carousel extractor

Aid was given to project Spotless for cut tobacco extraction.
The following table shows some of the results :

<u>Extr. Grade</u> <u>NO₃-N</u>	<u>Extr.</u> <u>time</u>	<u>Feedwater</u> <u>Temperature</u>	<u>Input (kg/h)</u> <u>cut tobacco</u>	<u>Input (l/h)</u> <u>water</u>
95%	40 min	80°C	18 1	190 11
98%	40 min	80°C	18 1	265 15
99%	40 min	80°C	36 1	540 15

The table shows an extraction grade for NO₃-N of 95% at a feedstock to water ratio of 1 : 11.

The extraction grade is 98% if more water is used for extraction.

The doubling of the feedrate to 36 kg/h did not change the extraction grade.

The extraction of cut tobacco was very efficient.

The achieved extraction grades were higher with cut tobacco than with other feedstock materials (Ref. 1). We think that this is mainly due to the large fiber surface of the cut tobacco.

A second offer for a pilot plant extractor was received from "Pruess Anlagentechnik", Wolnzach, Germany.

With respect to the purchase price it is a very interesting offer. A Pruess extractor was inspected during a visit to "Birkenweg" in Frankfurt and it showed a reliable and well constructed unit. (Ref. 2)

The decision whether to purchase a Pruess or an Ex-Technik extractor has to be made in the near future.

Dust stock situation

The dust stock in Onnens continued to decrease in April to approx. 90 tons.

References

- Ref. 1 : Monthly report, March 1980, Unit Operations II,
P. Karbacher, N. Lüthi.
- Ref. 2 : Report on the visit to "Birkenweg" in Frankfurt of
April 21st, 1980; April 30th, N. Lüthi.

PROCESS DEVELOPMENT

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May 8th, 1980
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